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R  
THE SCOLIIDAE (HYMENOPTERA) OF NORTHERN  
SOUTH AMERICA, WITH ESPECIAL REFERENCE TO  
VENEZUELA. — I. THE GENUS CAMPSOMERIS

by

*J. Chester Bradley.*

Among the most noticeable of wasps, because of their large size, and often because of bright color patterns are those belonging to the family Scoliidae. They are both solitary and fossorial, and therefore never as abundant in individuals as the social Vespidae, but in the tropics numerous species occur, some of which are abundant visitors of flowers. The females paralyze white grubs, the larvae of lamellicorn beetles. Attaching their eggs to these larvae, they work out a crude cell around them and leave them *in situ* to serve as food for their oncoming generation; for these are very primitive wasps, and have not attained the habit of constructing a genuine domicile of their own, as have their more advanced relatives the Psammocharidae and the Sphecidae.

While earlier authors included among the Scoliidae such genera as *Tiphia*, *Epomidiopteron*, *Pterombus* and *Myzine*, all of which occur in northern South America, more recent research indicates that these should be excluded from the family.



The Scoliidae, as thus restricted may be easily recognized. They have a habitus which once learned is unmistakable; the peculiar shape of the second submarginal cell of the forewing, combined with the fact that the venation is retracted leaving the apical third of the wing practically devoid of veins (figs. 1 & 2) gives their wings an appearance different from those of other wasps; the males, which often are more slender than the females, may be instantly recognized from all others by possessing a retractile trident at the apex of the abdomen, the three sharp prongs of which, when held captive, they insistently, but ineffectively, try to thrust into one's finger as though they were gifted, like their wives, with the power of inflicting a real sting. The stout spiny-legged females have short curled antennae, while those of the males are more slender and straight, but this character, and the fact that the legs of the males are more slender and less spinose, is a character shared with related families.

There are only two genera of Scoliidae in South America, *Campsomeris* and *Scolia*, the latter being most easily distinguished by the absence of the second recurrent vein and hence of the third discoidal cell in the forewings (fig. 2). The former genus is represented by many South American species, the latter by very few, the reverse of what is the case in the tropics of the Old World, especially Africa.

The primitive coloration in the family is represented in northern South America only by the males of *Campsomeris dorsata*, black, with broad yellow bands on the tergites, and yellow markings on the legs, head and thorax. Elsewhere females of some species retain this same primitive coloration, but there is a strong tendency in that sex for the yellow to become orange or red and restricted to the second and third abdominal tergites, which it nearly completely occupies, as in *dorsata* and *ephippium*, or for the yellow gradually to disappear, eventually leaving the entire body black, as in many tropical species. The males are more conservative, yet do follow the same tendencies, though much more slowly. In *dorsata* the male coloration has not been modified, and is

identical with that of the males of several other primitive species not occurring in the region in which the female coloration grades from that of the male to that of females of *dorsata*; in *ephippium* the males have reached the same ultimate stage attained by the females. This tendency explains why, in such species as *variegata* in which the females may be heavily marked with yellow or entirely black, the males are always strongly marked with yellow and do not attain the *costalis* or *lucida* forms of the female.

Without disparagement to the work of Saussure and Sichel, which has remained since 1864 the basis of all determination, and which was good enough in view of the limitations of the period, it is nevertheless a fact that those authors made certain misapplications of names and failed to discriminate between certain species; they also separated forms that are only color variants. It has therefore become necessary thoroughly rework the entire family.

I have had the opportunity of studying nearly all existing types of described species, so that the older names can now be applied correctly. This has inevitably involved certain changes, the worst of which is the restoration of the name *servillei* to the very common large black species upon which Saussure and Sichel bestowed the preoccupied name *hyalina*, and which stands under that name in nearly all collections.

While eventually it is my intention to treat monographically the entire New World fauna of Scoliidae, it seemed that it would be helpful to students of the insects of northern South America to have available a means for the ready identification of species known to occur in that area; and I hope that this paper may incite such students to collect these beautiful insects. Our knowledge of the species occurring in the mountainous areas of northwestern South America is less complete than in regard to any other part of South America, so that captures and records from that area will be particularly helpful in rounding out our knowledge.

The area covered by this paper includes Colombia, Vene-

zuela and the three Guianas. The general distribution is stated below for each species or subspecies known to occur within that area and the detailed data is recorded of such Venezuelan specimens as have come to notice. Among the latter a large proportion have been collected by my good friend, Mr. G. Vivas-Berthier. In giving the distribution I have taken into account only specimens that I have examined, excluding references based on literature.

### *Terminology and abbreviations*

In the descriptions of new species (but not in the keys) the abbreviations applied by J. G. Betrem, 1928, have been employed.

- ar. fr. = area frontalis, a triangular area between the antennal sockets, in *Campsomeris* merged with sp. fr.
- ar. h. l. = area horizontalis lateralis, the lateral two of the three divisions of the dorsal or horizontal surface of the propodeum.
- ar. l. m. = area horizontalis medialis, the median division of the dorsal surface of the propodeum.
- ar. l. = area lateralis, each lateral face of the propodeum.
- ar. p. = areae posteriores, the posterior vertical face of propodeum, consisting of ar. p. m., the median division and ar. p. l., the 2 lateral divisions.
- clyp. = clypeus.
- fiss. fr. = fissura frontalis, a median groove extending from the anterior ocellus to the sp. fr.
- fr. = frons, extending from posterior oc. to antennal sockets.



- lam. fr. = lamina frontalis, a curved ridge forming the inner margin of each antennal socket.
- mesopl. = mesopleura, consisting each of an upper and a lower plate.
- mesoscut. = mesoscutum.
- metanot. = metanotum, consisting of an. a. m., (= area medialis or postscutellum), and two a. l., (= areae laterales).
- metapl. = metapleura, consisting each of an upper and a lower plate.
- oc. = ocellus or ocelli.
- ocellar furrow = a transverse groove behind the hind oc.
- p. = puncture, punctation or punctate.
- par. f. = parapsidal furrows, on each side of mesoscut.
- scap. = scapulae, the shoulders.
- scut. = scutellum, *i. e.* mesoscutellum.
- sin. oc. = sinus ocularis, the emargination of the inner margin of the eyes.
- sp. fr. = spatium frontale, the area between the lam. fr.
- st. = sternite, the morphological number being given and the apparent number in parentheses, thus the last sternite of the male is 8 (7). But in the key only the apparent number is used.
- t. = tergite, numbered similarly to the sternites.
- v. = vertex, extending from the posterior oc. to the occipital carina, the occipital surface being that the upper margin of the head.

*Abbreviations of institutions*

- A. M. N. H. = American Museum of Natural History, New York City.
- A. N. S. = Academy of Natural Sciences, Philadelphia, containing the collections of the American Entomological Society.
- B. M. = British Museum (Natural History), London.
- Berl. M. = Zoologische Museum der Universität, Berlin.
- C. M. = Carnegie Museum, Pittsburg, Pennsylvania.
- C. U. = Entomological collections of Cornell University, Ithaca, New York.
- Coll. Spin.  
Torino = The collection of the Marchese Maximillian Spinola in the Mus. of the Instituto di Anat. e di Fisiol. compar., Università di Torino, Turin.
- Cop. M. = Zoological Museum of the University, containing a Fabrician collection, Copenhagen.
- Kiel = Zoologische Museum der Universität, also containing a Fabrician collection, Kiel.
- M. C. Genoa = Museo civico di Storia naturali "Giacomo Doria", Genoa.
- M. C. Z. = Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts.
- M. Geneva = Museum d'histoire naturelle containing the collection of Henry de Saussure, University, Geneva.
- M. Hung. = Hungarian National Museum, Budapest.
- Mun. M. = Museum der Zoologische Institut der Universität, Munich.
- M. Paris. = Museum d'Histoire Naturelle, Paris.
- M. Paul. = Museu Paulista, São Paulo, Brazil.
- U. S. N. M. = United States National Museum, Washington, D. C.



## KEY TO SOUTH AMERICAN GENERA OF SCOLIIDAE

- Second recurrent vein present (fig. 1) ..... **Campsomeris**.  
 Second recurrent vein absent (fig. 2) ..... **Scolia**.

## CAMPSOMERIS Lep.

If *nigrans* is the male of *fallax*, as seems probable, the number of species known from the region will be (17). Despite strong antigeny, fifteen of these are known in each sex, although with considerable uncertainty in regard to the ♂ of *colombiensis*. Only *idonea* and *sanctae-theresae* remain known from a single sex, the former from the ♀, the latter from the ♂. Apparently each is a very rare species, in all collections that I have examined only one of the former and two typical specimens of the latter having been found.

## KEY TO SPECIES AND SUBSPECIES OF CAMPSOMERIS OF NORTHERN

## SOUTH AMERICA

*Females*

- 1 a. The abdominal tergites entirely black, except rarely for two punctiform yellow spots on either the first or second ..... (9)
- b. Two or more tergites conspicuously marked with yellow, orange or red, or the second tergite with a large median yellow area ..... (2)
- 2 a. Posterior face of propodeum very densely, coarsely punctate throughout; hind tibial spurs acute .... (3)
- b. Posterior face of propodeum smooth, or only the upper third moderately punctate, or hind tibial spurs spatulate ..... (5)
- 3 a. Front entirely punctate below the ocelli; tergites 2 and 3 almost entirely orange. Length 40 mm. .... (4)
- b. Front below middle ocellus impunctate; tergite 2 with a discal yellow spot, tergite 3 black. Length about 25 mm. .... (\*) *vittata* (Sich.)

(\*) The ♀ of the only regional subspecies, *C. v. banksi* n. subsp. has not been discovered, and may or may not fall here in the key.

- 4 a. Wings dark with violaceous reflection.....  
       ..... **ephippium** (Say) subsp. **ephippium** (Say).
- b. Wings yellowish hyaline with ferruginous veins....  
       ..... **ephippium** (Say) subsp. **wagneriana** (Sss.)
- 5 a. Upper plate of mesopleura polished and impunctate,  
       without vestiture, and with no vertical ridge, the  
       tubercle low and rounded ..... (6)
- b. Upper plate of mesopleura more or less punctate,  
       with some setae, and with a vertical ridge; wings  
       without a conspicuous costal fuscous bar. .... (7)
- 6 a. Wings uniformly deep fusco-violaceous .....  
       ..... **hoffmannseggii** (Klug).
- b. Wings hyaline, with a strong fuscous bar along the  
       apical costal margin ..... **wesmaeli** (Lep.)
- 7 a. Vestiture entirely black ..... **variegata** (Fabr.)
- b. Vestiture wholly or in large part white, coppery, fer-  
       ruginous or golden ..... (8)
- 8 a. Calcaria pale; vestiture of body and legs coppery or  
       golden; more than 2 tergites spotted with yellow..  
       ..... **hesterae** Rohw.
- b. Calcaria black; vestiture white; tergites 2 & 3 almost  
       entirely orange or red, other tergites black .....  
       ..... **dorsata** (Fabr.)
- 9 a. All vestiture black ..... (12)
- b. Sternal vestiture, or at least preapical rows of setae,  
       or fringes of sternites 2 and 3, white or buff; upper  
       plate of mesopleura rounded and without a ridge  
       or strong punctures, often polished ..... (10)
- 10 a. Occipital surface of vertex impunctate to the oc-  
       cipital carina ..... (11)
- b. Occipital surface of vertex densely punctate above  
       occipital carina; wings smoky yellow; tergites 1-3  
       with white apical fringes .....  
       ..... **columba** (Sss.) subsp. **albofimbriata** (Sm.)

- 11 a. Wings blue-black with strong reddish violaceous reflection; mesoscutum and scutellum shining and impunctate, except for 3 punctures on each side of the former, and a group of 3 or 4 at the anterior angles of the latter; tergites 1-3 with fringes and discal vestiture white ..... *idonea* n. sp.
- b. Wings subhyaline or yellowish with strong costal fuscous bar; mesoscutum and scutellum with rows and groups of punctures; tergites with only black vestiture, or tergite 2 with an apical white fringe...  
..... *wesmaeli* (Lep.)
- 12 a. Mesopleura with a sharp, sometimes crested vertical ridge, or the upper plate with numerous coarse punctures, or both ..... (14)
- b. Mesopleura without a vertical ridge, its upper plate (except for fine punctures on the dorsal face directly below the tegulae) and the upper half of its lower plate smooth and polished ..... (13)
- 13 a. Wings with an apical fuscous bar along the costal margin; occipital face of vertex impunctate, except for a single row of punctures along the occipital carina ..... *wesmaeli* (Lep.)
- b. Wings yellowish brown, without a costal fuscous bar, but with a conspicuous patch of brown hairs in the marginal and first submarginal cells; occipital face of vertex punctate .....  
..... *columba* (Sss.) subsp. *columba* (Sss.)
- 14 a. Longer spur of hind tibiae distinctly spatulate ..... (21)
- b. Longer spur of hind tibia obtuse or acute ..... (15)
- 15 a. Medial dorsal area and posterior vertical area of propodeum confluent punctate throughout, without a separating ridge between them ..... (18)
- b. Posterior vertical area of propodeum impunctate, or punctate only along the dorsal margin ..... (16)



- 16 a. Longer spur of hind tibiae short and stout, .4 of length of the metatarsus; hypopygium subquadrate, with two heavy peglike lateral teeth; vertex shining and polished, but often sparingly punctate; mesoscutum shining, but with sparse, small punctures ..... (17)
- b. Longer spur of hind tibiae long and slender, .64 to .8 of length of the metatarsus; hypopygium rounded, the lateral processes small and spine-like, largely concealed by stiff bristles; vertex and dorsum usually coarsely cribrate; base of median dorsal area of propodeum with an impunctate velvety area, bordered posteriorly by a fringing row of erect stout bristles ..... *servillei* (Guer.)
- 17 a. Scapulae coarsely and sparsely punctate ..... *variegata* (Fabr.)
- b. Scapulae minutely and very densely punctate ..... *brethesi* (Bradl.)
- 18 a. Vertex coarsely punctate or cribrate ..... (19)
- b. Vertex impunctate except the occipital surface, a median group of a few punctures at the summit, and a few punctures near the eyes ..... *colombiensis* n. sp.
- 19 a. Vertex punctate, but not too densely, and not cribrate ..... (20)
- b. Vertex coarsely cribrate, bearing a median crest of course bristles ..... *cristata* n. sp.
- 20 a. Posterior ocelli connected behind by a straight, transverse groove, from near each end of which an oblique groove extends upwards; wings blue-black, with strong violaceous reflection ..... *ianthina* n. sp.
- b. Posterior ocelli enclosed within a crescent-shaped groove, no lateral grooves above them; punctures of vertex coarse and well-scattered; wings blue-black, often with strong green reflection ..... *nigrans* n. sp.

- 21 a. Median area of posterior surface of propodeum impunctate, except along upper margin, and there not closely ..... **peregrina** (Lep.)
- b. Median area of posterior surface of propodeum confluent punctate on at least the entire upper half. .... **regifica** n. sp.

### *Males*

- 1 a. Apical spurs of hind tibiae white; vestiture entirely white, or more or less fulvous, never entirely black ..... (2)
- b. Apical spurs of hind tibiae black, or if in aberrant individuals white or partly so, then the vestiture is entirely black ..... (7)
- 2 a. Four tergites with yellow bands, or the color of the first and second may nearly cover the dorsal surface of the tergite; no fuscous bar along the costal border of the wings; mesopleura never with a yellow spot ..... (5)
- b. Only 3 abdominal tergites with yellow bands or markings; costal margin of forewing with a fuscous bar; mesopleura often with a yellow spot.... (3)
- 3 a. Membrane of forewings uniformly hairy except along the posterior margin, more strongly infuscated in the 1st submarginal cell than at the apex of the wing; mesopleura usually with a yellow spot; tergites 1-3 with broad bands sometimes interrupted or reduced to lateral spots, but in that case the spots of tergite 2 are never linear. Small species, 12 - 19 mm. long. .... (4)
- b. Membrane of forewings beyond the cells devoid of hair except along the costal border; the apex as strongly infuscated as the 1st submarginal cell, or sometimes the entire membrane infuscated; mesopleura never spotted; tergites 1-3 (rarely includ-

ing also 4) with narrow apical lines, usually interrupted or reduced to lateral spots, but in that  
..... **fallax** (Sss.)

4 a. A fuscous bar along the costal border of the forewings, occupying the first submarginal and marginal cells, rarely weak; posterior border of pronotum with a broad yellow bend, usually reaching the tegulae; posterior margin of volsellae weakly undulate ..... **wesmaeli** (Lep.)

b. Costal border of forewings not infuscated; pronotum with a small amount of yellow pigment but no band; posterior margin of volsellae deeply emarginate ..... **sanctae-theresae** n. sp.

5 a. Membrane of forewings, beyond the cells, devoid of hair or very sparsely hairy behind a line continuing the cubital vein to the margin ..... (6)

b. Membrane of forewings uniformly hairy, except along the posterior margin; vestiture of front, vertex and dorsum strongly yellowish .....  
..... **hesterae** Rohw.

6 a. Vestiture, except at apex of abdomen, entirely and conspicuously white; tergites 1-4 with broad apical pale yellow bands, never interrupted .....  
..... **dorsata** (Fabr.)

b. Vestiture black at least on vertex and dorsum, that of the dorsum short; tergites 1-3 or 1-4 with narrow apical lines, usually interrupted medially ..  
..... **fallax** (Sss.)

7 a. Entirely black, or with at most a small spot on tergite one, or clypeus, humeri, front legs, or scutellum may be marked with yellow ..... (15)

b. Two or more tergites marked with yellow, white or orange, rarely only tergite 2 ..... (8)

8 a. Propodeum black ..... (10)

b. Propodeum with a median yellow spot; sternites 4-7 or 6 & 7 densely and minutely punctate, bearing



- brushes or erect hair; hind surface of propodeum shining, with only sparse minute punctures; vestiture white ..... (9)
- 9 a. Posterior part of sternite 4, as well as all of sternites 5-7 densely punctulate with erect brushes of silky white or black hair ..... **brethesi** (Bradl.)
- b. Sternites 4 and 5 with only normal sparse punctures, or sternite 5 also with a median posterior densely punctate area ..... **variegata** (Fabr.)
- 10 a. Scutellum and metanotum black ..... (12)
- b. Scutellum and metanotum, or only the latter, yellow. (11)
- 11 a. At least sternites 6 and 7 with fine dense punctures and bearing brushes of erect hair; tergites 3-5 with large lateral spots ..... **variegata** (Fabr.)
- b. Sternites neither with areas of fine dense punctulation nor bearing brushes of erect hairs ..... **hoffmannseggii** (Klug).
- 12 a. Tergites 2 and 3, and only these, in large part orange yellow, the anterior margin of this color neither sinuate nor notched ..... (14)
- b. Not so marked ..... (13)
- 13 a. Sternites without densely punctate areas that bear brushes of erect hair; tergites 1-3 with narrow apical yellow lines ..... **fallax** (Sss.)
- b. Sternites 7 densely punctate, and with an erect brush of hair; tergites 1 and 2 dorsally all yellow, or with a spot on tergite 1 and broad band on tergite 2... ..... **vittata** (Sich.) subsp. **banksi** n. subsp.
- 14 a. Wings dark with violaceous reflection ..... **ephippium** (Say) subsp. **ephippium** (Say).
- b. Wings yellowish hyaline ..... **ephippium** (Say) subsp. **wagneriana** (Sss.)
- 15 a. Ultimate and sometimes preceding sternites with areas of fine dense punctures from which arise brushes of erect hair ..... (25)

- b. Sternites more or less coarsely punctate, without areas of dense punctulation or brushes of erect hair ..... (16)
- 16. a. Second sternite with its basal surface rounding gradually into the ventral, without a median tubercle. Length 15-22 mm. .... (19)
- b. Second sternite with its basal surface truncate and almost perpendicular to the ventral, sometimes with a sharp median tubercle. Length 22-38 mm., usually 24 mm. or more ..... (17)
- 17 a. Second sternite without an acute tubercle. Length 24-38 mm. .... (21)
- b. Second sternite with a sharp median tubercle. Length not over 27 mm. .... (18)
- 18 a. Wings deep brown with blue-violet reflection; membrane of wings beyond the cells devoid of setae; parameres of male genitalia tapered ....  
..... **colombiensis** n. sp.
- b. Wings hyaline or slight stained yellowish brown; entire wing-membrane bearing setae; parameres truncate ..... **servillei** (Guer.)
- 19 a. Tergites very densely finely punctate throughout, bearing copious bushy black hair; wings deeply blue-violet with purplish reflection; wing membrane apicad of the cells devoid of setae .....  
..... **regifica** n. sp.
- b. Tergites, especially on their discs, much less densely punctate, the vestiture short and not unusually dense nor conspicuous; wings subhyaline, stained somewhat yellowish brown apically, or all over, the veins sometimes ferruginous; wing-membrane beyond the cells bearing setae on the costal half, or only along the costal margin ..... (20)

- 20 a. Mesonotum closely punctate, its disc with three parallel longitudinal ridges, the median one being anterior; collar and scapulae minutely and very densely punctulate, the intervals less than the diameters of the fine punctures; wing-veins and microsetae orange-brown, the membrane of the marginal and submarginal cells yellowish ..... **cristata** n. sp.
- b. Mesonotum less coarsely and closely punctate, its disc with only an anterior median raiser ridge; collar and shoulders finely and densely punctate but much less so than in the above, the punctures separated by considerably more than their diameters; wing veins and microsetae brown, the membrane not yellow, usually weakly infuscated along the costal border and on the apical portion... **fallax** (Sss.)
- 21 a. Setae uniformly distributed over the entire wing-membrane, except sometimes along the posterior margin; clypeus often marked with yellow ..... (22)
- b. Setae of the wing membrane beyond the cells confined to a narrow strip along the costal margin, apicad of the apex of the marginal cell; clypeus not marked with yellow ..... (23)
- 22 a. Abdominal vestiture entirely black; wings at most slightly yellow ..... **columba** (Sss.) subsp. **columba** (Sss.)
- b. Fringes of first 3 sternites white, at least laterally; 3 tergal fringes usually pale; wings strongly stained orange-brown ..... **columba** (Sss.) subsp. **albofimbriata** (Sm.)
- 23 a. Forewings not at all, or but slightly infuscated along the costal border ..... (24)
- b. Forewings with a deep brown bar along the costal border, involving all of the marginal cell and extending nearly to the apex of the wing ..... **wesmaeli** (Lep.)



- 24 a. Parameres pointed or but slightly truncate at apex, an oblique row of comparatively short, stout setae, very much sparser than in the following species, extending across the under surface, but not continuous with, or scarcely continuous with the marginal setae, which are also sparse, and do not extend cephalad of the apex of the volsellae ..... *wesmaeli* (Lep.)
- b. Parameres truncate at apex, an oblique double or triple row of copious, long but not stout setae extending across the inner surface and fully continuous with a similar row of outer marginal setae which extend basally cephalad of the apex of the volsellae ..... *sanctae-theresae* n. sp.
- 25 a. Fourth sternite with an area of dense punctulation and a brush of erect hair; dorsal surface of first tergite as long or longer than broad. Wings deep blue, with violaceous reflection ... *ianthina* n. sp.
- b. Fourth sternite with neither dense punctulation nor a brush of erect hair; dorsal surface of tergite one may be broader than long; three tergites with obscure yellow marking ..... *variegata* (Fabr.)

### C. *dorsata* (Fabricius).

1787. *Tiphia dorsata* Fabricius, ♀. Mant. insect. 1: 279. "Coromandel".
1807. *Scolia dorsata* Klug, ♀. Mag. Ges. naturf. Freunde Berlin. 2: 48.
1833. *Scolia haematogastra* Perty, ♀. Delect. anim. artic. Brazil. p. 139. Pl. 27, fig. 14.
1845. *Colpa rubida* Lepeletier, ♀. Hist. nat. insect, Hymen. V. 3, p. 544.
1854. *Elis dorsata* Saussure, ♀. Mém. Soc. phys. and hist. nat. Genève. 14: 1.
1864. *Elis (Dielis) dorsata* Saussure & Sichel, ♀, ♂. p. 230 & 308.

There are two females in the Fabrician collection in Kiel, arranged behind the Fabrician manuscript label "*dorsata*", bearing no other label, and one of these without a head. I have labelled the perfect specimen "lectotype". It may not be the original specimen and in that case may be consider neotype.

Fabricius erred in giving the locality as "Coromandel".

*Distribution*.—México and West Indies south to Paraguay.

*Venezuelan records*.—*Distrito Federal*: Caracas, 1 ♀ (A.M. N.H.); El Valle, 1 ♀, 15 Mar. '39 (G. Vivas-Berthier); Antimano 1 ♂, 27 Dec. '36 (G. Vivas-Berthier); Galipán, 1 ♀, 1900 m. alt., (G. Vivas-Berthier). Río Orinoco, 1 ♀, (G. K. Cherrie—C. M.)

This is probably the most common South American species of *Campsomeris*.

### C. *hesterae* Rohwer.

1927. *Campsomeris hesterae* Rohwer, ♀. Journ. Washington acad. sc. 17: 153 ..... Trinidad.

The type is in the United States National Museum.

*Distribution*.—México; Guatemala; Costa Rica; Panamá; Colombia; Venezuela; Trinidad.

*Venezuelan records*.—*Mérida*: 1 ♂ (M. Hung). *Distrito Federal*: Route Caracas, Colonia Tovar, km. 23, 1 ♀, alt. 1.850 m., Apr. '37 (René Lichy); Galipán, 1 ♀, 19 Oct. '36 and 1 ♀, 30 Apr. '39, alt. 1.900 m. (G. Vivas-Berthier).

### C. *vittata* (Sichel) new combination.

1864. *Elis (Dielis) vittata* Sichel, ♀. In: Saussure and Sichel, p. 214 ..... Brazil.

1910. *Scolia argentina* Brethes, ♂. An. Mus. Buenos Aires, 20: 258  
New synonymy ..... Paraná.

The type of *vittata* is in the M. Paris and is labelled "Mus. Paris. Brésil Isabelle 1835)), has a printed label "TYPE" and a third label in Sichel's writing "*Elis vittata* Sichel ♀. S. S. C. 229". Another specimen is the "variety" from México.

I have not studied the type of *argentina* Brethes.

♂: Third tergite entirely black; punctuation of the median area of the dorsal surface of the propodeum not dense, the punctures well separated.

**C. vittata (Sichel) banksi n. subsp.**

♂: The males of this subspecies differ from those of *C. v. vittata* in that the third tergite has a transverse yellow mark, and the punctuation of the median dorsal area of the propodeum is very dense.

*Types.* — PANAMÁ: Bella Vista, 1 ♂, 8 Aug. '24 (holotype, N. Banks — M. C. Z.) COLOMBIA: Magdalena, Chiriguana District, 1 ♂. Aug. or Sept. '24 (paratype, C. Allen — B. M.)

**C. ephippium (Say) new combination.**

1837. *Scolia ephippium* Say, ♂. Boston journ. nat. hist., 1: 363. .... México.

1838. *Scolia pettitii* Guerin, ♂. In: Duperrey. Voyage autour du monde... sur la corvette de S. M. la Coquille... Paris, A. Bertrand, 1828-32. v. 2, pt. 2. p. 249 ..... México.

1864. *Elis (Dielis) wagneriana* Saussure, ♂. In: Saussure and Sichel.

The type of Say has been destroyed, but no doubt has ever existed about the identity of the species.

I have examined the type of *pettitii* in the M. Paris. It is a male and bears a label in Guerin's handwriting "*Scolia pettitii* Guer. Voyage de la Coquille Mexique - type". Another male in the M. C. Gen. is labelled "*Scolia pettitii*, ♂ Guerin. Voy. Coquille Mexique" and is presumably a paratype. A ♀ in the Mun. M. is labelled "*Sc. pettitii* Guerin, type" and may be the allotype.

**C. ephippium (Say) subsp. ephippium (Say).**

*Distribution.* — Texas; México; Guatemala; Costa Rica; Colombia; Ecuador; French Guiana "Haut Amazonas". Common in México, rarely encountered elsewhere.

**C. ephippium (Say) subsp. wagneriana (Saussure) new status.**

1864. *Elis (Dielis) wagneriana* Saussure, ♂. In: Saussure and Sichel. p. 229-320 ..... Ecuador.

I have marked and hereby designate as lectotype of *wagneriana* a specimen labelled "Chimborazo" in the collection of Saussure, the only male in that collection, in the M. Geneva. Saussure stated that the type was collected by Maurice Wagner "Au pied du Chimborazo".



The genitalia of the males of *wagneriana* and *ephippium* appear identical, and the only distinction lies in the ferruginous or nearly hyaline wings of the former and blue-black wings of the latter. This could be considered merely individual variation, were it not for the fact that all Ecuadorian specimens are *wagneri*, all Mexican *ephippium*, intergrades occurring in Costa Rica. Nevertheless dark-winged individuals occur rarely in South America.

*Distribution.*—Ecuador; Colombia; Costa Rica.

### **C. ianthina n. sp.**

♀: Entirely black, including all vestiture; wings black with strong violaceous reflection.

Clyp. nearly flat, wrinkled, its sides bushily bristled, its base bristly; a narrow impunctate, transverse strip below each antenna; ar. fr. and sp. fr. not separated, the former without, the latter with a flat-topped median carina below, ar. fr. and sp. fr. densely p., forming a concave basin between the elevated lam. fr. filled with bristles, these continued in a dense strip across face into the sin. oc. but not reaching its apex; surface of fr. with two small p. between front ocellus and with a triangular group on each side, continued upwards as a line; fiss. front. well marked; anterior oc. in somewhat of a basin; ocellar furrow impressed, straight and with an oblique deep furrow extending backward from behind each end; an impunctate raised strip bordering the upper margin of the sin. oc. and its apex. V. with irregularly spaced, scattered coarse and sparse p., its occipital surface with a superior patch of somewhat smaller, closer p. above, running onto the upper margin, and with a band of finer p. above the occipital carina; temples impunctate. Front surface of scape p. and bristly.

Dorsal surface of pronotum and scap. densely p. and bristly, the vertical surface impunctate below and rounding above onto the dorsal, which is so short as scarcely to be existent medially; mesoscut. impunctate and polished in center, coarsely p. and bristly laterally, more densely along the anterior margin; scut. with an impunctate median strip, otherwise with coarse, not dense p., metanot. similarly but less coarsely p., and with a median impunctate strip; mesopl. as in *colombiensis*, even more bristly; metapl. bristly except lower part of upper plate.

Ar h. rounding into ar. p. without an intervening ridge, but with a slight median tubercle; ar. h. m. densely, coarsely p. and bristly throughout; ar. h. l. the same, but with longer bristles; puncture in front of spiracles indistinct, but some short bristles there; ar. p. l. and upper part of ar. p. m. with close-set deep pits, becoming shallower on the ar. p. m. as they descend, the lower part being impunctate.

Tergites mat; the vertical basal surface of st. 3(2) rounding without a tubercle into the horizontal; lateral teeth of hypopygium short and concealed in the long vestiture.

Longer hind tibial spur slender, not really acute nor yet spatulate, its length in proportion to metatarsus as 5 to 8.

L. 40 mm.; of forewing 32 mm. Length of paratypes 35-40 mm.

♂. Integument and vestiture entirely black; wings bronzed black with a violaceous tint.

Clyp. convex, laterally and basally coarsely p.; ar. fr. and sp. fr. confluent, coarsely p., without a median ridge; lam. fr. prominent, the hairs of the sp. fr. extended laterally and filling the sin. oc.; a few p. below the anterior oc., a large group at sides of oc. and between hind oc.; entire vertex and temples p. and hairy.

Dorsal surface of pronotum and scap. evenly and densely p. and hairy; mesoscut. more coarsely and less densely p.; notauli distinct; median furrow distinct on anterior 1/3, continued as a weak ridge almost to posterior border, an impunctate raised median area just forward of posterior margin; scut. and metanot. similarly p. and hairy, the former with an impunctate median strip; mesopl. uniformly p. throughout, like pronotum, except lower posterior corner of upper plate; lower part of upper plate and upper part of lower plate of metapl. impunctate.

Ar. h. m. short and rounding into ar. p. m. without carina or tubercle, both similarly closely p. and hairy; ar. h. l. and ar. p. l. both more densely p., ar. l. sparsely p. along anterior border.

Second (first) segment of abdomen wider than long, parallel-sided, and narrower at apex than the succeeding segment; dorsum shining, the t. more densely p. and bristly apically, the basal portions of 3-5 (2-4) with sparsely p. areas, but a transverse strip of fine p. across basal part of t. 5 (4); the apical t. with bushy coarse hair; st. 6, 7 & 8 (5, 6 & 7) and the apical half of 5 (4) finely p. and with erect hair forming moderately dense brushes.

Length 28 mm., of forewing 25 mm.

Structurally this species differs but little from *ephippium*, of which it may be a subspecies; but intergrades are not known and it seems better to assign it specific rank.

It seems to be a common species in northeastern Colombia and Venezuela, but elsewhere rare, there being scattered records southward to southern Brazil. The single Mexican record may be viewed with suspicion unless verified by additional material or records from intervening territory.

*Holotype and allotype.* — VENEZUELA: ♀ (holotype, C. U. Nº 171.1). COLOMBIA, *Magdalena*: San Lorenzo Mts., Hacienda Cincinnati, 4,500ft. alt., ♂ (allotype, C. U. Nº 171.2).

*Paratypes.* — MÉXICO: 1 ♀ (Sumichrast - M. C. Z.). COLOMBIA: *Magdalena*: San Lorenzo Mts., Hacienda Cincinnati, 2 ♂ ♂, 4,500 ft. alt. July 17, '20, Partidas, Hacienda Cincinnati, 1 ♀, 1 Jan. '23 (A. N. S. and C. U.); Hacienda Victoria. 1 ♂, 4,100-4,500 ft. alt., July 31 '20 (A. N. S.), Vista Nieve, 1 ♂, Dec. 22 '22 (A. N. S.); Ujheli, 1 ♂ (M. Hung.); *Cundinamarca*: Bogotá, 2 ♂ ♂ (M. Paris); *Intendencia del Meta*: Villavicencio, Quatquia R.,

1 ♂, '15 (B. M.); Guayabal, 1 ♂ (Steinheil - Mun. M.). VENEZUELA: 7 ♀ ♀, 26 ♂ ♂ (C. U., M. C. Genoa, M. Paris, Coll. von Schulthess in Zurich); Mérida: 2 ♀ ♀, 1 ♂ (M. Paris, M. C. Genoa); Mts. East of Mérida, 1 ♀ (C. M. ac. Nº 4.281); Aragua: Carretera Choroni, 1 ♀, 28 Sept. '38 (G. Vivas-Berthier); Maracay, 1 ♂, 28 Sept. '37 (G. Vivas-Berthier); Distrito Federal: El Junquito, Colonia Tovar, 1 ♂, 15 Jan. '39 (G. Vivas-Berthier); San Esteban, 1 ♀, March '88 (E. Simon - M. Paris). FRENCH GUIANA: Cayenne, 1 ♀ (M. Paris). BRAZIL: 1 ♀, (Mun. M.); Piauí: 1 ♀ (Mun. M.) Minas Geraes: 1 ♂ (C. U.); Rio de Janeiro: 1 ♀, 25 Nov. '26 (A. Seitz - C. U.); São Paulo: Itatiaya, 2 ♀ ♀, 3 Jan. and 3 Feb. '27 (A. Seitz - Frankfurt M.); Rio Grande do Sul: 2 ♀ ♀ (J. W. Stahl-Stockholm Mus.).

### C. cristata n. sp.

♀. Entirely black, including all vestiture. Wings brown, much darker in marginal and first submarginal cells, without violaceous reflection.

Clyp. nearly flat, medially impunctate but rough, laterally p. and with bushy bristles; ar. fr. and sp. fr. not separated, the latter divided by an elevated median ridge, the depression on each side between this and the strongly elevated and curved lam. fr. filled with a dense brush of bristles, which extend into and nearly fill the sin. oc. and upwards onto the front between the anterior oc. and an impunctate ridge bordering the orbits; fiss. fr. wanting; fr. with uneven surface and sparse p., coarser laterally; sin. oc. scarcely indicated. V. with irregular surface, extraordinarily coarsely p. throughout, the p. very deep and bearing heavy bristles directed caudad, the center of the hind margin free from p. and with a median furrow; the occipital surface nearly free of p.; temples with a few moderate p. Dorsal surface of scape evenly p.

Upper surface of pronotum obscured by coarse bushy bristles, longest on scap. which are densely p.; the anterior impunctate face rounds without evident ridge into the dorsal which is so short as to be almost non existent, and this upper part is densely hairy. Mesoscut, very coarsely p. and bristly in front and on each side of parapsidal furrows, medially in front more sparsely and less coarsely p., this p. area enclosed in a U-shaped slightly elevated smooth area; a short, median anterior carina; scut. with a median impunctate strip, p. and bristly on sides; metanot. p. and more bushily bristly throughout; upper plate of mesopl. coarsely p. and with a brush of coarse bristles above, not p. behind the ridge; lower plate with scattered p. becoming dense on the ridge and inferiorly, the ridge well-marked but not sharp; upper plate of metapl. with numerous p., the lower with very few.

Ar. h. m. very short and rounding directly into the ar. p., without intervening ridge nor median tubercle, its surface densely, deeply and very coarsely p. and bristly, this punctuation continuing without interruption onto the ar. h. l. and ar. p., but a basal strip of the ar. h. l. free of p.; ar. l. coarsely p. throughout.

Dorsum of abdomen mat; t. 3(2) — 6(5) with dense apical and sparse

preapical fringes. St. 3(2) with a basal vertical face, rounding into the horizontal; lateral peg-like spines of hypopygium somewhat concealed by equally long bristles.

Length 43 mm., of forewing 31 mm.

In the paratype the wings are black with violaceous reflection.

*Types*.—ECUADOR: Normandía, 1 ♀ (holotype, C. U. Nº 172.1). BRAZIL: Bahia, 1 ♀, 1903 (paratype, R. Oberthür - M. Paris).

*Variant*. — Colombia: Ibagué, Tapias, 1 ♀ (Steinheil - Mun. M.) Wings bronzed hyaline, with piceous veins, and weak rosy apical reflection, a little more infuscated in the apical membrane; upper plate of the mesopleura punctate, but not coarsely. The vertex has the typical cribrate punctures and bunch of coarse bristles.

### **C. colombiensis n. sp.**

♀: Entirely black, including all vestiture except a furry tuft of whitish pubescence close to wing-base on each side of scutellum. Wings and veins black, with strong violaceous reflection.

Clyp. low, nearly flat, wrinkled, its sides and base punctate and bristly; a transverse, impunctate puberulent strip below antennae extending to genae; ar. fr. and sp. fr. not separated, the former with a sharp smooth median carina, both coarsely closely p. and densely hairy with short, stout hairs, the hair extending well into the sin. oc.; lam. fr. low; fr. smooth with a group of a few p. near each eye; fiss. fr. well marked; anterior oc. in a pit; ocellar furrow sharply impressed, curved; an impunctate strip bordering the upper edge of the sin. oc., extending to the apex of the sinus. V. impunctate, except for a few p. at corners of eyes, 2 or 3 on each side above level of ocellar furrow, and the entire occipital surface, which is strongly p., the p. extending on to the upper margin of the v. medially; temples nearly impunctate. Front surface of scape coarsely p.

Dorsal surface of pronotum including scap. uniformly densely and not coarsely p. and bristly, a very narrow impunctate median strip, the impunctate vertical face rounding above, without a transverse ridge, in such manner that there is scarcely a dorsal face; mesosc. coarsely p. throughout except for a spot behind the middle, coarsely and closely at the sides, more sparingly in the center, more finely and densely along the anterior margin; scut. coarsely but not closely p., with a vaguely defined impunctate median strip; metanot. similarly p., but more closely and less coarsely; mesopl. with a sharp vertical ridge, extended on to upper plate, and heavily bristled, as is entire upper plate except the hind corner; lower plate behind the ridge with sparse fine hairs; upper plate of metapl. impunctate except long upper margin, the lower plate with a few scattered fine p. and hairs.



Ar. h. m. produced behind into a triangular tubercle, but without a distinct ridge terminating the sides, with a median triangular impunctate area and on each side coarsely, closely p. and bristly, more densely so toward sides; ar. h. l. densely p. and bristly except in front of spiracles; a. p. uniformly coarsely p. throughout; ar. l. uniformly p.

Dorsal surface of abdomen mat; st. 3(2) with basal vertical face rather abruptly meeting the horizontal, but without a tubercle; hypopygium nearly truncate, the two lateral teeth small and concealed by bristles.

Length 25 mm. of forewing 23 mm. Length of paratypes 24-30 mm.

♂: A male in the British Museum, the distinguishing characters of which are given in the key, may be at least tentatively assigned to this species. It comes from Colombia, is labelled "Weston coll". Three other males in the collection of the late Dr. Von Schulthess in Zurich probably are the same; they are labelled "Venezuela". I refrain from designating any of these allotype or paratypes.

*Types.* — COLOMBIA, *Magdalena*: El Banco, ♀ (holotype, C. Allen - B. M.); *Santa Marta*: 1 ♀, 1853 (paratype, Fontanier - M. Paris). VENEZUELA: 17 ♀ ♀, 1890 (paratypes, Boucard - M. C. Genoa); *Mérida*: 1 ♀ (paratype, M. Paris).

### C. nigrans n. sp.

1896. *Elis nigra* Fox, ♀. p. 301. *Misidentification of nigra* Sss.....  
..... Brazil: Matto Grosso.

♀: Entirely black including all vestiture; wings black with strong violaceous reflection.

Clyp. convex, wrinkled, the sides and base bristly; a broad impunctate puberulent strip below each antenna; sp. fr. and ar. fr. not separate, both densely p., the latter slightly raised but not carinate medially, its sides somewhat depressed and bristly; lam. fr. prominent; patch of bristles extending laterally into sin. oc., but not to its apex; fr. coarsely p. between oc. and eyes, but not below anterior oc. which is large and in a basin; fiss. front. distinct; sin. oc. with a raised impunctate strip forming its upper border; ocellar furrow curved, without oblique furrows at its ends. V. with sparse coarse p. throughout, becoming smaller and denser on occipital surface; temples with a row of finer p. along eye-margin. Front surface of scape p. and bristly.

Dorsal surface of pronotum densely p. and bristly throughout, the vertical face rounded into the dorsal which is scarcely existant medially; mesoscut. coarsely p., more sparsely in center, more densely along anterior margin and with a small impunctate area behind center; scut. with coarse scattered p. except in center; metan. more closely and finely p. and bristly, with a narrow median impunctate ridge; mesopl. with a sharp vertical ridge, the slopes of which are p. and bristly, the upper plate impunctate behind, except along upper border, the lower plate with scattered fine p. and hairs; upper plate of metapl. p. along upper border, the lower plate in its center.

Ar. h. m. terminating in a pronounced tubercle on either side of which it rounds into the ar. p. without limiting ridge, its entire surface coarsely, densely p. and bristly; the ar. h. l. more densely and finely but also deeply p., except in front of spiracles; ar. p. m. and ar. p. l. deeply, rugosely p., the p. becoming obsolete below on the former; ar. l. coarsely p. except along anterior margin.

Dorsum of abdomen mat; basal vertical surface of st. 3(2) rounded abruptly into the horizontal, but without a tubercle; peg-like teeth on sides of hypophygium of about the length of the bristles, but easily seen.

Longer hind tibial spur acute, in proportion of 4 to 6.

L. 29 mm.; of forewing 24 mm.

*Holotype*. — BRAZIL, *São Paulo*: S. Bernato, ♀, Apr. '27 (R. Spitz - C. U. Nº 173.1).

*Paratypes*. — COLOMBIA: Lake Sapatoza region, Chiriguana Distr., 1 ♀, Aug. - Sept. '24 (C. Allen - B. M.). VENEZUELA: 1 ♀, (C. U.) FRENCH GUIANA: Cayenne, 1 ♀ (M. Paris). BRAZIL: 1 ♀ (M. C. Z.); *Goyaz*: Rio Uruhú, 1 ♀ (Baer-M. Paris); *Matto Grosso*: Cuyabá, 2 ♀ ♀ (C. U. and M. Hung.); Chapada, 5 ♀ ♀, Mar. & Apr. (C. M., Ac. Nº 2.966), 1 ♀, Nov. (H. H. Smith - A. N. S. P.); *Rio de Janeiro*: Organ Mts. near Tijuca, 2 ♀ ♀, 500-1.000 m. alt., 1902 (E. R. Wagner - M. Paris); *São Paulo*: Rio Prieto, Fazenda Dumont, 3 ♀ ♀, 24 Apr. '27 (O. Conde - C. U.); Ypiranga, 2 ♀ ♀, July '25 (R. Spitz-M. Paul. and C. U.); *Rio Grande do Sul*: 2 ♀ ♀ (M. Paris and M. Hung.); Porte Alegre, 3 ♀ ♀ (M. Paris and M. Hung.), 1 ♀ (C. U.). ARGENTINA, *Misiones*: Tijucuaré near San Ignacio, 1 ♀ 1911 (E. R. Wagner - M. Paris); Villa Lutetia, near San Ignacio, 1 ♀, 1910 (E. R. Wagner - M. Paris); *Santa Fé*: Las Garzas, bords du Rio Las Garzas, 25 kil. a l'o. d'Ocampo, 2 ♀ ♀, 1903 (E. R. Wagner - M. Paris). BOLIVIA: Santa Cruz de la Sierra, 1 ♀, Nov. '10, alt. 450 m. (J. Steinbach - C. M., ac. Nº 4.548).

### *C. fallax* (Saussure) new combination.

1854. *Elis fallax* Saussure, ♂. Mem. Soc. phys. & hist. nat. Genève.

15: 1 ..... "Locality unknown".

1864. *Elis* (*Dielis*) *hyalina* var. *fallax* Saussure and Sichel, ♂. p. 220.

I have examined the type in the Saussure collection in the Museum of the University of Geneva. It is labelled in Saussure's handwriting "Amer. merid.", "Anc. dépôts" and "Camp-

*someris fallax* Sauss.” on a later label, also in Saussure’s hand “*Dielis hyalina* Sss.” The specimen has the weak second recurrent vein noted by Saussure. I have labelled it “holotype”.

This species differs structurally from the ♀ of what Saussure called “*hyalina*” and is probably the male of what I describe here as *nigrans*.

*Distribution.* — Colombia and British Guiana to Brazil and Argentina (Misiones).

### C. *wesmaeli* (Lepeletier) new combination.

1845. *Colpa wesmaeli* Lepeletier, ♀. Hist. nat. insect. Hymen. v. 3, p. 536 ..... Brazil.  
 1851. *Scolia conformis* Spinola, ♂, ♀. Mem. Accad. sci. Torino, (2)3: 61. *New synonymy* ..... Brazil: Pará.  
 1855. *Scolia conspicua* Smith, ♀. Cat. Hymen. Brit. mus., v. 3, p. 107. *New synonymy* ..... Brazil: Pará.  
 1897. *Elis dorsata* Fox, ♀, in part. p. 305. *Misidentification* ..... Brazil: Pará.

The holotype of *Colpa wesmaeli* Lep., described from a ♀ from “Brazil, Mus. Serville” is in the Coll. Spin. Torino. It stands in front of a label that reads “*Colpa wesmaeli* Le Pell, ♀. typus Coll. Serville. Bresil”. The pin bears a label, probably in the handwriting of Saussure, bearing the single word “Chercher”, and the specimen agrees precisely with the original description.

*Scolia conformis* was described by Spinola from 1 ♀ and 4 ♂ ♂ from Pará (Ghiliani) and 1 ♂ and 1 ♀ from Klug. In Spinola’s collection there are 2 ♀ ♀ standing over a label that reads “*Scolia conformis* Klug ♂ ♀ D. Ghiliani Pará 1846”. The sign for ♂ has been subsequently stricken out. Further there are two males that stand over a label which reads “*Scolia* ♂ an *conformis* Klug var.? D. Ghiliani 1846 Pará”, and two more males over a label that reads “*Scolia conformis* Kl. M. B. - C. *Colpa* Le Pell? ♂ ♀. D. Klug Brésil”. It is clear that the ♀ here referred to has been transferred to stand beside the ♀ from Ghiliani, probably at the time the sign “♂” was stricken out, and the male referred to probably replaced it. Thus six of the original seven of the type series are accounted for.

Of these I have marked and hereby designate the better preserved ♀ "lectotype". It agrees precisely with the description and apparently is the original specimen received from Klug. The other ♀ is the variety with the third tergite black, and probably is the ♀ collected by Ghiliani in Pará.

The holotype of *Scolia conspicua* Smith is in the B. M. It is the only specimen in the collection from Pará, and the name label bears the word "Type" in Smith's handwriting.

This is another highly variable and rather common species. The maximum coloration appears in the form "*conspicua*" in which scutellum, postscutellum, and nearly all of the dorsal surface of tergites 1 and 2 are yellow; this grades into the form "*conformis*" which has less yellow on tergites 1 and 2, but also spots on tergite 3; from this one gets gradation (the greater abundance of individuals being intergrades) into the typical *wesmaeli* which lacks yellow markings on the abdomen, but retains them on either the scutellum or postscutellum or both. Numerous individuals without any yellow represent the ultimate stage of reduction, and no particular name has been applied to these.

Since all these forms represent strictly chance variation, there is no necessity for retaining names for them.

*Distribution.* — México; Costa Rica; Panamá; Colombia; Venezuela; Trinidad; British, Dutch and French Guiana; Brazil; Paraguay; Perú and Bolivia east of the Andes.

*Venezuelan records.* — 1 ♂ (M. Paris). *Mérida*: 1 ♂, (M. Hung.). *Distrito Federal*: 1 ♀, 1934 (G. Vivas-Berthier); Caracas, 3 ♀ ♀ (M. Geneva), 1 ♂ (M. Paris). *Apure*: San Fernando de Apure, 1 ♀, 5 Oct. '97 (L. Laglaize - M. Paris). *Anzoátegui*: Barcelona, 2 ♂ ♂ (M. Paris).

### **C. sanctae-theresae n. sp.**

♂: Integument and vestiture entirely black, the tergites iridescent; wings hyaline, stained somewhat yellowish, the veins piceous and ferruginous.

Clyp. convex wrinkled, coarsely p. and bristly at base and sides; ar. fr. with a median carina, p., scarcely separate sp. fr., this not depressed, p. and bristly; lam. fr. not elevated; fr., v. and temples p. and hairy except a small area below front oc., widened into a line above sp. fr.



Pronotum and scap. more closely and finely p. than mesoscut.; the latter strongly p. and hirsute throughout except for a median spot just in front of hind margin; median part of each side of scut. and metanot. p., and a line along basal margin of former; mesopl. p. like the pronotum, but a large area on lower hind corner of upper plate, involving the ridge, impunctate, and also the hind edge of the lower plate; metapl. impunctate except for a few small p. on upper part of upper plate.

Ar. h. m. and ar. h. l. closely p., rounding into area p.; on the ar. p. m. the punctures become smaller, and at the middle obsolescent; ar. l. punctate, sparsely below anteriorly.

T 2(1) parallel-sided, narrower at apex than the succeeding t.; t 2-4(1-3) sparsely p., t 5-7(4-6) more closely p. and with longer bristles; basal surface of st 3(2) oblique and rounding into the horizontal surface, no tubercle; apical st. bristly, but the p. coarse, there being no areas of dense fine p. with brushes of erect hair.

Length 22 mm., of forewing 19 mm.

*Types.* — BRAZIL, *Espirito Santo*: Santa Thereza<sup>(\*)</sup>, 2 ♂ ♂, Oct. and 19 Nov. '28 (O. Conde - holotype Nº 174.1 and para-type Nº 174.2, C. U.)

### *Color forms*

1 a. Body entirely black; tibial spurs piceous..... (2)

b. Dorsal surface of first tergite and a broad undulate band on third tergite yellow; apical spurs of hind tibiae white; vestiture white. Setae on palette small and scanty ..... *form c.*

2 a. Vestiture entirely black ..... *form a.* (typical)

b. Vestiture of legs, propodeum and thorax more or less white ..... *form b.*

*Form b.* — FRENCH GUIANA: Maroni, 1 ♂ (C. U.)

*Form c.* — BRAZIL, *Minas Geraes*: Uberaba, 1 ♂ (C. U.)

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(\*) I know of no Santa Thereza in Espirito Santo; there is a river of that name in Goyaz, and a town in São Paulo on the railway to Uberaba (where form c was collected) 227 km. south of that city; another is in the State of Rio de Janeiro.

### C. *hoffmannseggii* (Klug) new combination.

1805. *Scolia hoffmannseggii* Klug, ♂. Beitrag. z. Naturk. 1: 37 ..... Brazil.  
 1851. *Scolia* (*Colpa*) *hexaspilota* Spinola, ♂, ♀. Mem. Accad. sc. Torino. (2) 13: 60. *New synonymy* ..... Brazil: Pará.  
 1864. *Elis* (*Dielis*) *ambigua* Sichel, ♂. In: Saussure and Sichel. p. 235 and 310. *New synonymy*.  
 1897. *Scolia klotzii* Dalle Torre, ♂. Catal. hymen. v. 8, p. 167.

The holotype of *hoffmannseggii* Klug is in the Berl. M. It bears labels in Klug's hand "Pará" and "*Hoffmannseggii* m." and a printed label "TYPE". Three other males in the same collection labelled "Type" are not type material, as the species was described from an unique specimen.

Spinola described *hexaspilota* from 2 ♀ ♀ and 1 ♂ from Brasil, from the coll. Ghiliani at Pará.

In the coll. Spin. Torino there are 2 ♀ ♀ pinned in front of Spinola's label "*Scolia hexaspilota* m. ♀ (*Colpa* Lep.) D. Ghiliani. Pará 1846". Both specimens are in poor shape. The larger I have marked and hereby designate "lectotype" of *hexaspilota*; its last 3 abdominal segments are lacking and the eyes eaten out.

In the same collection there are two males also pinned in front of a label reading "*Scolia hexaspilota*, m. ♂. D. Ghiliani Pará 1846". One of these bears a label, probably in the handwriting of Saussure, reading "*Sc. hexaspilota* type ♂ Spin. La *Sc. hexaspilota* ♀ type = *Elis hoffmannseggii*". This male I hereby designate the allotype of *hexaspilota*. The other male does not agree with the description and does not belong among the types. A male in the M. Paris, although labelled type, is not the allotype, but may be a paratype.

The type of *ambigua* is in the M. Paris. It is labelled, by Sichel, "*Elis ambigua* Sichel, ♂, n. sp." and has a printed label "Brasilia. Freireiss", and is also labelled "Museum Paris. Coll. O. Sichel 1867", "Type", "Saussure at Sichel Cat 249" and "*Elis ambigua* Sichel ♂, n. sp." the last in Sichel's handwriting. I have marked it "holotype".

*Distribution.*—French Guiana; British Guiana; Brazil; Paraguay.

**C. idonea n. sp.**

♀: Entirely black; highly polished; vestiture sparse and white, except for a transverse strip of black bristles across front above antennae, a few black hairs on vertex and mesonotum, black bristles mixed in with white setae above occipital carinae, black bristles on scapulae, a single row of very stout recurved black bristles, like the teeth of a rake, across the anterior margin of the dorsal surface of the pronotum, black preapical fringe of t. 6(5) and except laterally of t. 5(4), and bristles on last abdominal segment entirely black; spines of legs and calcaria piceous; besides the erect white hair there is a small amount of appressed white puberulence, chiefly on parts of pleura, Ar. 1. and median coxae; mandibles with a long ferruginous psammophore on lower edge. Wing membrane and veins uniformly black with strong violaceous reflection, purple on the hind wings; membrane devoid of hair except along basal 2/3 of costal margin where it is brown.

Clyp. evenly but not strongly convex, low, punctate around its lateral and basal margins, with a longitudinal median furrow. Ar. fr. and sp. fr. not separated, coarsely p.; lam. fr. low and not extended above antennal bases; fiss. fr. present; fr. polished, impunctate except for 1 or 2 p. on each side and a row above sp. fr. extending into sin. oc. V. impunctate except for a row around orbits and a group of a few p. on each side; ocellar furrow finely impressed, slightly curved; temples and occiput polished and impunctate to the occipital carina; scape flattened, the upper surface with 3 or 4 coarse p., finer, setigerous p. along each edge.

Dorsal surface of pronotum very short, its concave anterior margin surmounted by a comb of stout bristles, forming a sharp angle with the anterior, vertical, impunctate and polished face; only the scap. p., and these coarsely and irregularly; mesoscut. polished, impunctate except for a line of 3 or 4 p. mesad of each parapsidal furrow, and a submarginal group of 3-5 in front of each of these; notauli wanting, but a median groove present anteriorly; mesoscut. scut., metanot. and ar. h. m. forming a single perfectly even, in profile slightly curving, nearly impunctate and highly polished surface, these parts separated from one another only by narrow sutures; scut. with a group of 3 p. in each antero-lateral corner; metanot. with 4 or 5 p. on basal margin; mesopl. shining and impunctate, except for small p. above coxae and on dorsal surface immediately below tegulae, the tubercle very low and rounded, and no carina; metapl. impunctate, less polished because of more traces of fine tomentum.

Ar. h. m. with an apical ridge produced into a strong median point, impunctate medially, and with coarse, irregularly placed, well separated p. laterally; ar. h. l. separated from ar. l. by a sharp carina, its surface bearing well separated coarse p. and basal decumbent white bristles; ar. p. m. impunctate except for close, coarse p. below the dorsal, overhanging ridge; ar. p. l. laterally coarsely p.; ar. l. closely p. except the anterior lower portion.

Abdomen dorsally with a silky lustre; St. 3(2) with a basal vertical face, which rounds into the horizontal abruptly, but with neither a ridge nor tubercle.

Hind tibial spur slender, the longer one spatulate and in proportion of .31 to .39 with length of metatarsus.

L. 19 mm., of forewing 16 mm.

*Type*.—FRENCH GUIANA: Cayenne, 1 ♀ (holotype-M. Paris).

**C. *columba* subspecies *columba* (Saussure) new combination.**

1858. *Elis (Campsomeris) columba* Saussure, ♀. Ann. Soc. ent. France, (3) 6: 236 ..... Venezuela.

1864. *Elis (Dielis) columba* Saussure and Sichel, ♀, ♂. p. 223.

I have examined the type from Caracas, in the M. Geneva.

*Distribution*.—Colombia and Venezuela.

*Venezuelan records*.—Mérida: 1 ♂ (M. Paris). *Distrito Federal*: Caracas (type, ♀), 1 ♂ (A. M. N. H.).

**C. *columba* subspecies *albofimbriata* (Smith) new status.**

1879. *Scolia albofimbriata* Smith, ♀, ♂. Descr. n. sp. of Hymen. in the Brit. mus. p. 189 ..... Costa Rica.

Of the 2 ♀ ♀ and 1 ♂ in the B. M. from Cache, Costa Rica, the type locality, the one that agrees most precisely with the description is marked type in Smith's handwriting. I have labelled it "holotype", the ♂ "allotype".

*Distribution*.—Costa Rica; Panamá; Colombia.

**C. *variegata* (Fabricius).**

1793. *Scolia variegata* Fabricius, ♂. Ent. syst. v. 2, p. 230.

1810. *Scolia fuscata* Klug, ♀, Beitr. z. Naturk. 2: 213 ..... Brazil.

1845. *Campsomeris costalis* Lepeletier, ♀. Hist. nat. insect. Hymen., v. 3, p. 497 ..... Cayenne.

1845. *Campsomeris lucida* Lepeletier, ♀. Loc. cit. p. 498 .. Cayenne.

1854. *Elis (Campsomeris) lativentris* Saussure, ♀. Mem. Soc. phys. et hist. nat. de Genève. 14: 1 ..... Brazil.

1855. *Scolia irregularis* Smith, ♀, ♂. Hymen. Brit. mus. v. 3, p. 107. .... Brazil.

1868. *Elis (Dielis) lucida* Saussure and Sichel, ♀. p. 219.



1868. *Elis (Dielis) costalis* Saussure and Sichel, ♀. p. 223.

1868. *Elis (Dielis) variegata* Saussure and Sichel, ♀, ♂. p. 226, 303.

1927. *Scolia costalis* Bradley, ♀. p. 168.

1940. *Campsomeris servillei* Bradley. p. 8.

The synonymy of this species and the types of the various names are fully discussed by the author in the last reference given above.

This is a highly variable species, and is probably the third most common species in northern South America, being out-ranked in this respect by *C. dorsata* (Fab.) and *C. servillei* (Guerin).

In the typical form it is more or less richly adorned with yellow in each sex, but this is gradually reduced, until, in the ♀, yellow spots appear only on tergite 1 or 2, while in the females of form "*costalis*" yellow markings are entirely absent. Both forms have been bred from nests of *Atta* (*i. e.* undoubtedly from lamellicorn larvae in these nests) at Mende in the State of Rio de Janeiro by Dr. H. Eidmann, or were taken on the nests at the same time; males were also taken. It seems clear that these are chance variants, and do not require separate names.

The females of the form *lucida* differ from the all black form in having dark wings, but do not differ structurally. Since this form is widely distributed over the same area as the typical form, it seems probable that it is also a chance variant, and does not need to be recognized with a name. The dark-winged form may also have yellow spots on the tergites, and the wings may be blue-violaceous throughout (form *fuscata*) or only along the costal area, greenish elsewhere (*lucida*) or entirely greenish or orange-brown (*lativentris*).

Entirely black males are unknown.

In 1927 I misapplied the name *lucida* to a common species of western Argentina, which in 1940 I named *luciflua*, correcting the error.

*Distribution.* — México; Guatemala; Costa Rica; Panamá; Colombia; Venezuela; Tobago; British Guiana; Dutch Guiana; French Guiana; Brazil south to Rio Grande do Sul; Perú and Bolivia east of the Andes.

*Venezuelan records.* — 2 ♂♂ (M. Paris), 1 ♂ (J. W. Birschell - B. M.). *Aragua:* Maracay, 2 ♀♀ (P. Vogt - Mun. M.)

*Distrito Federal:* Caracas, 1 ♀, '00 (D. Gribodo - M. C. Genoa).

**C. brethesi** (Bradley) new combination.

1927. *Scolia* (*Campsomeris*) *brethesi* Bradley, ♀. An. Soc. cient. Argentina, 103: 8 ..... Trinidad.

*Distribution.* — Panamá; Colombia; Trinidad; British Guiana; French Guiana; Perú; Bolivia east of Andes; Brazil: (São Paulo).

♂: The ♂, not previously recognized, may be distinguished from the ♂ of *variegata* by the sternal brushes, as indicated in the key; the males are heavily marked with yellow. The spines on the hind tibiae are black in all but one of the 27 specimens examined, but the hair on the same may be all black, mixed or occasionally all white.

*Allotype.* — PERÚ, *Loreto:* San Roque near Iquitos, ♂, alt. 360 ft., Jan. 1929 (Klug - C. U.).

**C. servillei** (Guerin).

1831. *Scolia servillei* Guérin, ♀. (*In* Duperry, Louise Isidore. Voyage autour du Monde... sur la corvette de S. M. la Coquille. Paris, A. Bertrand, 1828-32. v. 2, pt. 2. p. 250 and pl. 8, fig. 8).. Perú.

1845. *Campsomeris hyalina* Lepeletier, ♀. Hist. nat. insect. Hymen. v. 3, p. 497 (*nec* Klug 1832) ..... Surinam.

1868. *Elis* (*Dielis*) *hyalina* Saussure et Sichel, ♀, ♂. p. 219.

1895. *Scolia neotropica* Gribodo. Boll. Soc. ent. ital. 27: 223 (new name for *hyalina* Lep. *nec* Klug).

1927. *Scolia hyalina* Bradley, ♀. p. 168.

1940. *Campsomeris servillei* Bradley. p. 8.

The synonymy of this species and the types of both *servillei* and *hyalina* Lep. have been fully discussed by the author in 1940. In northern South America it is the most abundant species of *Campsomeris* with the possible exception of *C. dorsata*.

*Distribution.*—Guatemala; Costa Rica; Panamá; Venezuela; Trinidad; Dutch and French Guiana; Brazil; Argentina (Misiones); Paraguay; Perú; Bolivia west to coast; Chile: Arica.

*Venezuelan records.*—Mérida: 2 ♀ ♀ (C. U.). Aragua: Route Choroni-Maracay, 1 ♀, 28 Sept. '37 (G. Vivas-Berthier). Monagas: Quiriquire, 1 ♂ (Helen K. Hodson-C. U.)

### *C. regifica* n. sp.

♀: Entirely black, including all vestiture. Wings black, violaceous, with a strong purple tint, especially on hind pair; sides of abdomen strongly hairy.

Clyp. nearly flat, wrinkled, p. but not very densely at base and sides; an impunctate strip below each antennal socket; ar. fr. punctate only laterally and scarcely distinct from sp. fr.; lam. fr. strongly elevated and nearly straight; sp. fr. densely p. and. bristly, with a fine median carina above, the p. strip extending laterally into the sin. oc.; this impunctate except inner part of lower half, and a row of fine p. along eye-margin; fr. elevated medially; fiss. fr. distinct and in a furrow; anterior oc. in a basin; fr. and v. uniformly impunctate and polished, the former with 3 or 4 small punctures on each side; ocellar furrow faintly impressed, straight but with each end curved toward the ocelli a short groove on each side above it; temples impunctate; occipital surface of v. bristly and impunctate except for a median group of small, close p. extended laterally above occipital carina. Anterior surface of scape coarsely p. on basal 3/4 and again across apical 1/8.

Anterior vertical face of pronotum rounding into the medially very short horizontal face, densely bristled above, the p. finer and denser along the anterior part of the p. area, absent along the posterior margin; the scap. unevenly p., coarsely on the disc, an elevated ridge or tubercle at the sides, impunctate in its summit with scattered p. on sides; between it and the tegula a deep transverse pit which is itself p.; mesoscut. imp. and polished except the parapsides which are sparsely p., a single or in part double row of p. parallels the par. f. on inner side, and a sparse group of p. across anterior portion; median furrow distinct on anterior 1/3; scut. and medial plate of metanot. impunctate and polished; anterior and posterior parts of mesopl. impunctate, the median vertical ridge sharp and coarsely p., the tubercle below the wing acute; metapl. impunctate.

Ar. h. m. a little less than 1/2 as long as its basal width (proportion 33:75), its side-sutures curved and convergent apically, separated by a ridge from the ar. p. medially more pronounced, its surface coarsely and deeply but

not densely p., an impunctate median strip; ar. h. l. impunctate except the outer apical part which has fine p. intermingled with deep coarse p.; ar. p. m. finely, densely p. and with a pronounced brush of long coarse hair, the punctures obsolescent below; ar. p. l. impunctate and smooth except for coarse p. around the edges; ar. l. impunctate except for a strip around the apical margin.

Dorsum of abdomen mat. the sides of the tergites and the more apical ones strongly bristly; st. 3(2) with a pronounced but not acute median tubercle, and a basal vertical face; lateral teeth of hypopygium concealed by the long vestiture.

Apical spurs of hind tibiae long and slender, the longer one spatulate, its proportion to length of metatarsus as 75:103.

Length 45 mm., of forewing 38 mm.

♂: Entirely black, including all vestiture; wings black with purplish violaceous reflection; propodeum and dorsum of abdomen covered with long silky black hair.

Clyp. convex, wrinkled, coarsely p. at sides and base; ar. fr. distinct, with a few coarse p.; sp. fr. sparsely p. below, densely above, with median carina; lam. fr. less prominent than in ♀; fr. and sin. oc. punctate except for a strip on former above the sp. fr., and impunctate laterad of ocelli; fiss. fr. wanting; ocellar furrow faint. V., including occipital surface, p. and hairy.

Dorsal surface of pronotum and scap. uniformly p. and hairy; mesoscut. with sparse small p., more dense anteriorly; notauli faintly impressed; scut. p. except for a narrow median strip; metanot. p. except posterior margin; mesopl. p. and hairy; metapl. largely impunctate.

Ar. h. m. p. and hairy, with a suggestion of an apical ridge, medially; ar. h. l. less coarsely p., the punctures becoming very fine and hair short on anterior inner corner and in front of spiracles; ar. p. punctate and hairy; ar. l. punctate except along anterior margin.

T. 2(1) a little broader than long, but distinctly narrower at apex than t. 3(2), all t. closely, finely, p. and with long silky hair; st. 3(2) with vertical basal surface and a suggestion of a tubercle, strongly hairy; more apical sternites with much coarse, declivant hair or bristles, arising from large, not dense p., smaller on the last st., but none of them with areas of fine, dense p. nor brushes of erect hair.

Length 37 mm., of forewing 34 mm.

*Types*.— BRAZIL, Amazonas: Maués, ♀, ♂ (A. H. Fassl. ♀ holotype and ♂ allotype, C. U.)

*Paratypes*.— COSTA RICA: 1 ♀, 1922, 2 ♂ ♂, 1920 (Paul Serre - M. Paris). COLOMBIA: 1 ♀ (M. Paris). BRITISH GUIANA: Kartabo, 1 ♀, 4 Apr. '24 (New York Zoological Society). FRENCH GUIANA: St. Jean de Maroni, 1 ♀, 1 ♂, 1914 (M. Paris). PERÚ, Loreto: Huallagray, 1 ♂ (M. Hung.)



**C. peregrina (Lepeletier).**

1845. *Colpa peregrina* Lepeletier, ♀. Hist. nat. insect. Hymen., v. 3, p. 534 ..... (Erroneously stated as from Java).  
 1858. *Elis regina* Saussure, ♀. Ann. Soc. Ent. France, (3) 6:237 ....  
 ..... Brazil and Mexico.  
 1864. *Elis regalis* Sichel, ♀. In: Saussure et Sichel. p. 190 and 298.  
 ..... (Erroneously cited as from China).  
 1927. *Scolia regina* Bradley, ♀. An. Soc. cient. Argentina, 103:167.  
 1940. *Campsomeris peregrina* Bradley, ♀. Loc. cit., 130:5.

The author (1940) has fully discussed the synonymy of this species and the types of the names involved.

*Distribution.*—Colombia; Venezuela; British Guiana; Brazil; Argentina (Misiones; Chaco); Paraguay; Ecuador; Peru; Bolivia.

*Venezuelan record.*—*Distrito Federal:* Los Canales, Nai-guatá, 1 ♀, 720 m. alt., 23 July '39 (G. Vivas-Berthier).



Fig. 1.—*Campsomeris*, ♀.

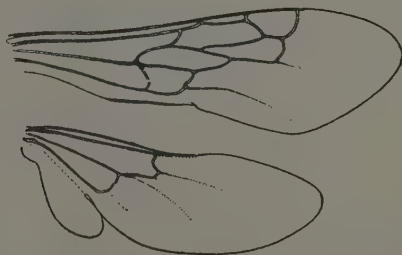


Fig. 2.—*Scolia*, ♂.

## BIBLIOGRAPHY

Here are listed only the works most useful to students of South American Scoliidæ.

**Betrem, Johan George.**

Monographie des indo-australischen Scoliidæ mit zoogeographischen Betrachtungen. Wageningen, Holland, H. Veenman and Zonen, 1928. 2 p. 1., 388 p. 5 pl. (...Treubia; recueil de travaux zoologiques, hydrobiologiques et océanographiques... Vol. IX - supplement).

This paper is included because of its great importance as a background for a study of the family, even though it does not deal with the American fauna.

**Bradley, James Chester.**

Sobre las hembras de las especies de "Scolia" del subgénero Campsomeris (Dielis) con color del cuerpo y ropaje completamente negros. Anales de la Sociedad científica Argentina, 1927. 103: 164-170.

In this paper a key is presented to the black females at that time known to occur in South America.

**Bradley, James Chester.**

Otras consideraciones sobre las especies Americanas de Campsomeris de coloración absolutamente negra. *Loc. cit.*, 1940. 130: 3-12.

In this paper the synonymy is discussed, and correction made in the nomenclature of species incorrectly identified in the preceding paper.

**Fox, William J.**

Contributions to a knowledge of the Hymenoptera of Brazil. Nº 1. Scoliidæ. Proceedings of the Academy of natural sciences. Philadelphia, 1896, p. 292.-307.

**Saussure, Henri de and Sichel, Jules.**

Catalogue des espèces de l'ancien genre Scolia contenant les diagnoses, les descriptions et la synonymie des espèces, avec des remarques explicatives et critiques. ... Genève, Henri Georg (etc., etc.), 1864. 2 p. 1., 352 p. 2 col. pl.

This work has been the chief source for the identification of Scoliidæ since its appearance; it contains color descriptions of all species. But it must be used with caution, since many names are misapplied.

## BREVE NOTA SOBRE MIASIS HUMANAS EN VENEZUELA

por

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Después de una revisión bastante minuciosa de la literatura médica venezolana, nos hemos dado cuenta de los pocos casos de miasis humanas que se han publicado en nuestro país. Sin embargo, estos traumatismos causados por larvas de moscas son más frecuentes de lo que podía sugerir el estudio de la literatura, ya que muchos médicos nos han comunicado casos que han tratado. También he sabido que los indios de algunas regiones del interior sólo se emborrachan de noche porque como lo hacen hasta la insensibilidad no pueden, de día, protegerse de las moscas.

Las miasis venezolanas pueden dividirse en tres tipos: miasis cutáneas, miasis de cavidades y miasis gastro-intestinales. De los dos primeros tipos hay formas primitivas en las cuales las larvas sólo afectan tejidos sanos y formas secundarias en las cuales las larvas afectan tejidos necrosados.

Las miasis cutáneas son del tipo furunculooso, causadas por larvas de *Dermatobia hominis* y raramente por larvas de *Cuterebra*. Las producidas por *Dermatobia* son muy fre-

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cuentas en algunas regiones sobre todo de los llanos, tan frecuentes que ya nadie les hace caso, ni los afectados se preocupan de tratamiento médico. La localización de estas miasis es muy variable, esencialmente hechos del azar. Hemos visto casos y tenemos informes de localizaciones en el cuero cabelludo, en la región escapular, en los brazos, en la región glútea (Dr. C. Alegría) en los párpados, en la región temporal, etc. También vimos un caso de miasis cutánea con localización en el ante-brazo en una mujer de Caracas, que atribuimos a una larva de *Cuterebra*. Examinamos la larva muerta algo deteriorada en la extracción. Consideramos este caso como accidental, ya que las *Cuterebra* parasitan sólo ciertos mamíferos.

De las miasis de cavidades, parece que la más frecuente en Venezuela es la nasal. Hemos visto un caso en vía de curación y tenemos referencia de muchos otros (Drs. Briceño Iragorry, Raul van Praag, Demetrio Castillo et. al.), algunos de estos graves, con perforación del paladar y penetración de los sinus frontales. Tenemos también referencias de miasis de cavidades uterina (Dr. A. L. Briceño Rossi), gingival (Dr. A. L. Briceño Rossi), rectal (Dr. H. Valdiviezo) y miasis secundarias de úlceras fagedénicas.

Los agentes de estas miasis son desconocidos, con excepción del caso del Dr. L. Briceño Iragorry, quien tuvo la precaución de criar las larvas y obtuvo adultos que fueron clasificados como *Calliphora cavitaria*. Es de suponer que las miasis de cavidades de Venezuela, como ocurre en otros países se deban a moscas de la familia Calliphoridae.

Quizás el tipo de miasis más interesante, por su rareza y por las condiciones desconocidas que afectan el metabolismo de las larvas, es el gastro-intestinal. Tenemos conocimiento de un solo caso auténtico para Venezuela. El Dr. C. Alegría, al referirnos el caso, y la historia clínica, hizo constar la geofagia del parasitado. Parece que en la región de Chejendé (Trujillo) persiste la costumbre de los aborígenes precolombianos de mascar ciertas arcillas y hasta tienen "come-  
alino      tiempo



deros" especiales. El Dr. Alegría tuvo la amabilidad de donar una de las larvas de su caso a la colección del Instituto de Higiene, la cual pudimos identificar genéricamente como *Sarcophaga* sp.

En los casos referidos de miasis intestinal, no puede tenerse demasiado confianza en el diagnóstico. Se han diagnosticado muchos casos falsos por el mero hecho de haberse visto larvas de moscas en las deposiciones, pero en pocos casos se ha tenido la seguridad de que las larvas fueran evacuadas vivas, ya con cierto grado de desarrollo en los intestinos. Recordamos que muchos años antes de que el origen de las disenterías de "mayo" de Caracas fuera establecido por el Dr. L. Briceño Iragorrry, se culpaba a las larvas de moscas como agente causal de la enfermedad.

El móvil principal de esta breve nota es despertar interés en los médicos que lleguen a tratar estas miasis, en el sentido de que llevén más allá del tratamiento, la investigación del agente causal, es decir, que críen las larvas una vez retiradas de las heridas, o de las heces, hasta obtener adultos.

Para los que no quieran criar larvas en carne con los consecuentes malos olores, nos permitimos recordar que en las crías masivas de larvas y sobre todo en los experimentos que se hicieron para el tratamiento de la osteomielitis, se ensayaron varios medios de cultivo estériles, con muy buenos resultados. Los más utilizados fueron (a) agar-suero de equino en proporción de 10 a 1; (b) agar-sangre-NNN; (c) agar glucosado con 1.5% de peptona; (d) agar-leche. Estos medios de cultivo pueden obtenerse en el Instituto de Higiene y pueden conservarse mucho tiempo a la temperatura ambiente. Es de advertir que antes de colocar las larvas en los medios de cultivo, es necesario desinfectarlas utilizando entre otras sustancias el hidróxido de sodio al 2%.



## SUMMARY

A brief note on the incidence of human myiasis in Venezuela is made on the basis of a few medical reports. So far, only one species, *Calliphora cavitaria* has been properly determined as causative agent in a case of rhinal myiasis. Data on culture media for the rearing of maggots is also given.

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